

# Protein Innovations Advance Drug Treatments, Skin Care

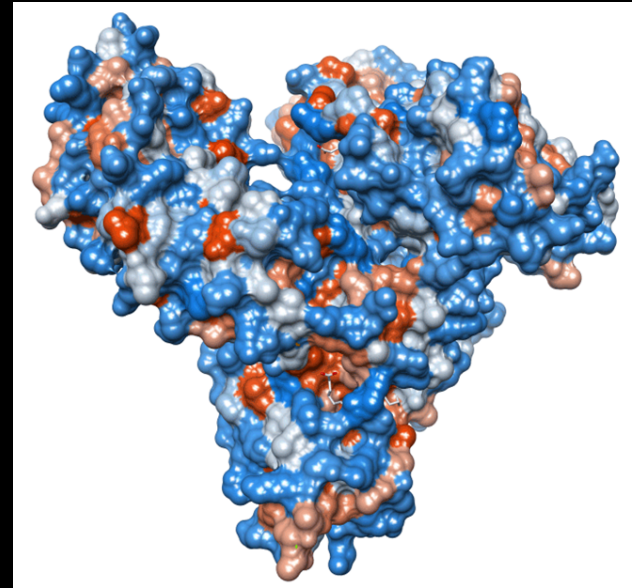


***Marshall Space Flight Center***

***New Century Pharmaceuticals Inc.  
Huntsville, Alabama***

## **NASA Technology**

- ◆ NASA was experimenting with crystal growth in space in order to create and study complex protein structures
- ◆ Among the targeted proteins was the human serum albumin, notable for absorbing portions of drug treatments and making them less effective



## **Partnership**

- ◆ Using crystal-growing techniques and specialized X-ray detection equipment, NASA scientist Dan Carter mapped albumin's structure for the first time
- ◆ Carter formed New Century with colleagues and continued to work with NASA through grants
- ◆ New Century compiled CADEX, the world's most extensive library of atomic structures showing the binding characteristics of drugs and albumin

## **Benefits**

- ◆ Knowledge of albumin led to the creation of Albagen, a hypoallergenic drug delivery product, as well as a unique line of skin-care products
- ◆ New Century recently developed Salus, a treatment approach that fine-tunes anti-cancer drugs to individuals and lowers dose requirements